

IN THE TITLE:

Please replace the title with the following amended title:

A¹ METHODS EMPLOYING PERMANENT MAGNETS HAVING REACH-OUT MAGNETIC
FIELDS FOR ELECTROMAGNETICALLY PUMPING, BRAKING, AND METERING
MOLTEN METALS FEEDING INTO METAL CASTING MACHINES

IN THE SPECIFICATION:

On Page 1, please delete from line 6 to the end of the page.

Please add the following paragraph after the title:

CROSS REFERENCE TO RELATED APPLICATION

A² This application is a continuation-in-part of U.S. patent
application Serial No. 09/483,813 filed January 15, 2000, ^{now U.S. Pat. No. 6378743} the
contents of which are hereby incorporated by reference.

Please insert the following paragraph at page 32, after the
first two full paragraphs and before the last paragraph:

ADDENDUM

A³ Controlling flow of molten metal comprising the steps of:
providing a pressurizing conduit having a working area
formed of graphite, a fragile material;

protecting said graphite by shrouding it in a jacket formed of suitable rugged material having heat endurance and ability to withstand mechanical shocks and stresses;

and interposing electrically non-conductive material in said jacket positioned around said graphite for isolating the graphite from damage and unwanted piping stresses and from mechanical and electrical shocks and stresses occurring within said jacket.

Controlling flow of molten metal by providing a pressurizing conduit formed of ceramic, a somewhat fragile material.

Protecting said ceramic by shrouding it in a jacket formed of suitable rugged material having heat endurance and ability to withstand mechanical shocks and stresses, and interposing electrically non-conductive material in said jacket positioned around said ceramic for isolating the ceramic from damage and unwanted piping stresses and from mechanical and electrical shocks and stresses occurring within said jacket.

End of ADDENDUM

IN THE CLAIMS:

Please cancel Claims 2-46 and add new Claims 61 through 84 which read as follows:

47 61. (New) Apparatus for controlling flow of molten metal comprising:

a conduit formed of non-magnetic material having a passage suitable for controlling flow of molten metal in said passage;

first and second assemblies of neo-magnets positioned on opposite sides of said conduit for providing an intense magnetic field B extending through said passage in a direction generally perpendicular to flow M of molten metal in said passage;